

SCIENCE

Theme 1: Human Body: The Circulatory System

The prime focus of this theme is to introduce children to the different organs involved in the process of blood circulation and to make them understand how the different organs of the circulatory system function. The second focus of this theme is to develop awareness regarding how to keep the body healthy by using some simple physical/ yogic exercises.

Learning Outcomes:

Children will be able to:

- ☑ identify organs of the circulatory system in a picture/model;
- ☑ locate position of each organ on the human body (Cut outs);
- ☑ draw pictures of various organs of the circulatory system and label them;
- ☑ describe functions of each organ and explain the process of circulation using scientific terms/words;
- ☑ differentiate between arteries and veins and name the major arteries and veins;
- ☑ explain functions of blood;
- ☑ discuss various ways (yoga exercises) to keep the heart healthy and strong;
- ☑ do simple yogic exercises to keep the body strong and healthy under the guidance of expert /teacher (deep breathing).

Human Body: The Circulatory System

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Revisit learning of Class IV on human body. ➤ Circulatory System. ➤ Organs/Parts of the circulatory system, their structure, functions (heart, arteries, veins), functions of blood. ➤ Process of circulation through pictures, visuals in simple terms (no technical knowledge to be given). 	<ul style="list-style-type: none"> ➤ Providing opportunities to children to observe various organs related to the circulatory system (using models, pictures). ➤ Organizing group discussion to observe chart showing various organs & process of circulation. ➤ Providing opportunities to children to develop working model on circulatory system. ➤ Performing simple <i>Asanas</i> to show deep breathing pranayama and asking the children to follow and practice doing the same ➤ Drawing and labelling circulatory system individually in the class. ➤ Showing slides of blood and discussing blood reports. ➤ Demonstrating inhaling and exhaling process 	<ul style="list-style-type: none"> ➤ Pictures / diagrams of internal organs. ➤ Diagram of the circulatory system, model of heart. ➤ Working model of the circulatory system. ➤ Cut outs of the human body showing the circulatory system. ➤ Material on process of circulation ➤ Diagram made by children of the circulatory system and organs. ➤ Microscope to observe blood slides ➤ Video.

Theme 2: Human Body: The Skeletal System

This theme introduces children to the Skeletal System. The main objective of this theme is to provide information related functions of bones, body movement and movement of different kind of joints. The theme is also expected to provide awareness regarding how to keep the body healthy by performing simple exercises. Importance of a healthy diet for bones and muscles to function, will also be discussed in this theme.

Learning Outcomes:

Children will be able to:

- ☑ identify major bones of the human body and name them;
- ☑ draw diagrams of major bones and name them;
- ☑ describe functions of major bones of the human body;
- ☑ locate major joints of the human body and discuss their functions;
- ☑ draw diagrams of the shoulder and knee joints and their location in the body;
- ☑ give examples of other kinds of joints in the human body;
- ☑ identify food items that are calcium rich;
- ☑ following simple exercises (under guidance) to make bone and muscles strong;
- ☑ demonstrate correct posture to keep body healthy and strong both in sitting /standing position.

Human Body: The Skeletal System

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Skeleton system-bones. ➤ Importance of bones, muscles and joints for the body. ➤ Functions of bones, major bones of the body - arms, legs, chest bone, skull, jawbone, backbone. ➤ Care of bones and joints, food items to make the bones strong. ➤ Importance of good posture and exercise. 	<ul style="list-style-type: none"> ➤ Providing opportunities to children to share and discuss information related with this theme. ➤ Providing opportunities to observe visuals and pictures of actual bones, in the skeleton system to develop clarity on this theme. ➤ Making drawings of bones/muscles and labelling them. ➤ Giving opportunities to children to observe different kinds of joints and demonstrating how they work. ➤ Demonstrating simple physical exercises to improve body posture. ➤ Initiating discussions related to improving body health. ➤ Demonstration of correct posture for standing and sitting positions. ➤ Yoga exercises for muscles and joints 	<ul style="list-style-type: none"> ➤ Skeleton of whole human body. Bones, Joints of knee, shoulder, elbow. ➤ Charts showing different bones, joints, jaws, etc. ➤ Children's drawing of major bones and joints. ➤ Food items rich in calcium and minerals.

Theme 3: Food and Health

In the previous classes, children learnt about the significance of various components of food for healthy living. In this theme, children will learn about diseases related to food habits / lifestyle, along with deficiency diseases. Harmful effects of junk food and ways to avoid them will also be covered in this theme.

Learning Outcomes:

Children will be able to:

- ✓ discuss various components of food required for healthy living;
- ✓ give reasons of the need for a balanced diet;
- ✓ enlist healthy and junk food items and differentiate between them;
- ✓ suggest/find out some ways to make diet healthier;
- ✓ give reasons for some deficiency diseases and find out ways to prevent/reduce them;
- ✓ develop awareness regarding adulteration in food items;
- ✓ find out diseases related to life style, including those related to food habits;
- ✓ state symptoms of some lifestyle diseases such as obesity, anaemia, diabetes, blood pressure;
- ✓ suggest some ways to avoid these diseases;
- ✓ infer why sprout food and fermented food is good for health;
- ✓ appreciate the use of various components of food for our body.

Food and Health		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<p>Revisit previous learning.</p> <ul style="list-style-type: none"> ➤ Components of a balanced diet, importance of eating a balanced diet. ➤ Junk food: meaning and examples; adverse effects of eating junk food. ➤ Ways to make diet more healthy (e.g. sprouting, fermentation). ➤ Diseases related to food habits, life style (obesity, anaemia, diabetes, blood pressure); and symptoms of the diseases in simple terms. Prevention of these diseases in non-technical terms. ➤ Deficiency diseases - some common deficiency diseases (Kwashiorkor, marasmus, night blindness, anaemia, rickets, scurvy, beriberi, goitre); and ways to prevent them. 	<ul style="list-style-type: none"> ➤ Building on previous learning. ➤ Providing opportunities to children to discuss components of food & their effects on health. ➤ Organizing simple activities to classify junk and healthy food. ➤ Undertaking project work and evolving ways to avoid junk food and writing slogans and exploring various other practical solutions. ➤ Conducting small group activities with children for them to find out the kind of food adulterants, and their effects (support material). ➤ Providing opportunities to see films on lifestyle related diseases and discussion on for their prevention. ➤ Organizing talks and interaction with a doctor to 	<ul style="list-style-type: none"> ➤ Children's experiences related to daily life. ➤ Various kind of food items rich in carbohydrates, protein, fats, vitamins and minerals. ➤ Various food items shown as junk food. ➤ Examples of various kinds of food items as rich in carbohydrates, proteins, fat, minerals vitamins, roughage and water. ➤ Material on various kinds of diseases (other than textbook) ➤ List of healthy food items (examples). ➤ Materials/pictures on various deficiency diseases. ➤ Narratives on deficiencies / life style related.

Food and Health		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<p>➤ Meaning of food adulteration; examples of some common adulterants (awareness level only).</p>	<p>learn more about healthy food habits, deficiency diseases and ways to prevent them.</p> <p>➤ Conducting survey in the children's surroundings/local neighbourhood.</p> <p>➤ Discussing diseases related to life style and ways to avoid them.</p> <p>➤ Discussing diseases related to deficiency of food components.</p>	

Integration: Languages



Theme 4: Pollination

This theme aims to introduce children to the process of pollination in plants.

Learning Outcomes:

Children will be able to:

- identify various parts of flower and label each part;
- draw diagrams of each part of a flower (after observation);
- locate parts of a flower involved in the process of pollination;
- explain/discuss process of pollination by using technical terms;
- differentiate between self and cross pollination and cite examples of each kind (showing pictures);
- recognise and relate the need of the pollination for plants.

Pollination		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
Revise parts of a flower. ➤ Androecium and gynoecium. ➤ Pollination. ➤ Bisexual and monosexual flowers. ➤ Process of pollination. ➤ Some ways of pollination (self and cross pollination).	➤ Revisiting previous concepts and learning. ➤ Building on previous learning. ➤ Showing pollen grains in flowers, and their transfer. ➤ Creating opportunities for group discussion, asking questions and sharing experiences by children. ➤ Conducting simple experiments/activities to locate different parts of the reproductive organs in a flower ➤ Asking children to draw pictures of a flower, parts of reproductive organs and to label them. ➤ Making worksheets on the concepts related with this theme.	➤ Different flowers with reproductive parts (male and female) ➤ Bisexual and mono -sexual flower diagrams made by children of the flower and reproductive parts. ➤ Charts/ diagrams of different kind of flowers. ➤ Charts/ pictures/ e-content depicting pollination/process. ➤ Examples of self and cross pollination in flower. ➤ Worksheets.

Theme 5: Plant Reproduction

The theme introduces children to sexual and vegetative reproduction in plants. Methods of seed dispersal will also form a part of this theme.

Learning Outcomes:

Children will be able to:

- draw and label the male and female reproductive parts of a flower;
- discuss the need for the process of fertilization in plants;
- explain the process of fertilization in plants;
- identify the different kinds of reproduction in plants (by observing pictures);
- cite examples of different kinds of reproduction in plants;
- identify various parts through which vegetation reproduction takes place and give examples.
- give examples of each kind of seed dispersal;
- discuss the need and significance of seed dispersal.

Plant Reproduction		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Process of sexual reproduction in plants: fertilization and formation of seed. ➤ Dispersal of seeds (air, water, animals). ➤ Other ways of reproduction in plants: Vegetative reproduction: meaning; vegetative-reproduction from stem cuttings (potatoes, onion, ginger) root (carrot), leaf (Bryophyllum). 	<ul style="list-style-type: none"> ➤ Conducting simple activities (small group/individually) to observe, draw, compare and clarify different parts of reproductive organ in plants. ➤ Arranging visits to a nursery for children to observe vegetative reproduction in some plants. ➤ Worksheets on new concepts practiced by children. ➤ Collecting different seeds and their classification based on dispersal methods. ➤ Project work by children in groups or individually on growing plants through vegetative propagation in potato. ➤ Demonstrating experiments on process & conditions for seed germination. 	<ul style="list-style-type: none"> ➤ Children's drawings, visuals/charts of the reproductive organs. ➤ Flowers with androecium, gynoecium. ➤ Chart/e-program showing the fertilization process. ➤ Plants having vegetative reproduction (i.e. potato, carrot, ginger). ➤ Nursery/ School garden. ➤ E-content-on plant reproduction. ➤ Children's project work. ➤ Collection of different kinds of seeds. ➤ Examples of various kind of dispersal of seeds.

Integration: Social Studies.

Theme 6: Solids, Liquids and Gases

The theme introduces children to different forms of matter (solids, liquids and gases) and their physical properties through simple demonstration and activities. The theme is also expected to develop an understanding of a number of concepts related to the properties of solids, liquids and gases.

Learning Outcomes:

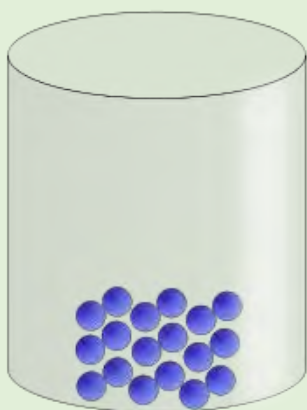
Children will be able to:

- ✔ identify different forms of matter and cite examples of each based on observable properties;
- ✔ state simple properties of solids and demonstrate the same through simple activities;
- ✔ state simple properties of liquids and demonstrate the same through simple activities;
- ✔ state simple properties of gases and demonstrate the same through simple activities;
- ✔ describe composition of air and depict it diagrammatically;
- ✔ cite examples of warm and fresh air in different situations in daily life;
- ✔ differentiate between wind, breezes, storms and give examples;
- ✔ explain why ventilators and windows are needed in houses, buildings and halls;
- ✔ relate the use of fans, air conditioners and coolers in different seasons.

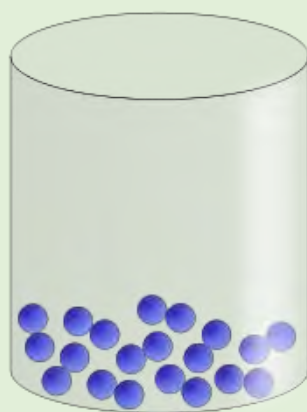
Solids, Liquids and Gases		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<p>Revision of Class III learning</p> <ul style="list-style-type: none"> ➤ Solids: Properties of solids: definite shape, geometry. Give examples of sugar crystals. ➤ Liquids: Properties of liquids: occupy space, flow from high level to low level, take the shape of the container. ➤ Separation of liquids from solids. ➤ Gases: Properties of gases: no definite shape and volume. ➤ Composition of gases in air; with experiment- land and sea breezes, monsoon breezes. ➤ Role of ventilators in houses/halls, closed spaces- warm air lighter than fresh air. 	<ul style="list-style-type: none"> ➤ Revisiting concepts. ➤ Building on previous learning. ➤ Showing some crystals of sugar, copper sulphate, potash alum to children. ➤ Conducting experiments to demonstrate how to make solutions by using various solvents. ➤ Conducting activities/experiments demonstrating various ways of separating impurities. Take a liquid- milk, water, some juice etc. Take different containers like test tubes, beakers, glasses of different sizes. Transfer a definite volume of liquid from one container to the other. Show that the liquid changes its shape and takes the shape of the container. ➤ Conducting simple experiments showing soluble and insoluble substances in solvents. ➤ Citing examples of various solutions used in day-to-day life. ➤ Organizing demonstration to show the 	<ul style="list-style-type: none"> ➤ Some crystals of sugar, copper sulphate and potash alum. ➤ Soluble and insoluble substances; examples of soluble and insoluble substances. ➤ Apparatus for conducting simple experiments to describe properties of solids, liquids and gases. ➤ Different sizes of containers and liquids. ➤ Sand, water, sieve and filter paper. ➤ Gas chimneys, exhaust fan in kitchens and laboratories.

Solids, Liquids and Gases

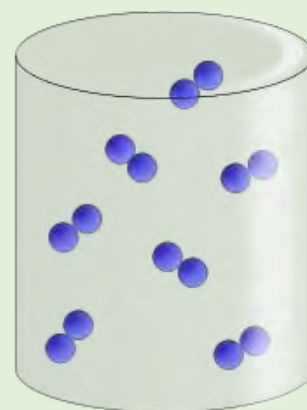
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
	<p>processes of separation, sedimentation, decantation, filtration, and their examples.</p> <ul style="list-style-type: none">➤ Asking children to blow air into a balloon. Showing them that air occupies different volumes in balloons and that balloons can expand.➤ Giving examples of filling air in tyres of bicycle, cars, trucks, etc.➤ Giving examples of coolers and exhaust fans. Showing children how smoke is thrown out by exhausts and chimneys.	



Solid



Liquid



Gas

Theme 7: Interdependence in Living Beings-Plants and Animals

This theme aims to develop an understanding of the relationship between producers (as plants) and consumers (as animals) and their inter-relationship in the environment. Concepts related to the food chain, producers, consumers will also be developed under this theme.

Learning Outcomes:

Children will be able to:

- ☑ differentiate between plants and animals based on some features (plants as producer while animals as consumers);
- ☑ infer why plants can make their own food;
- ☑ cite examples of producers and consumers;
- ☑ classify living beings as producers and consumers;
- ☑ explain the food chain by taking examples as seen in daily life;
- ☑ identify decomposers, scavengers and cite their examples;
- ☑ discuss and explain causes of imbalance in nature;
- ☑ generalize/ infer the effect of hunting, forest fires in the environment.

Interdependence in Living Beings-Plants and Animals

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Plants as producers, living things as consumers, their examples. ➤ Simple food chains, scavengers and decomposers. ➤ Causes of imbalance in nature (some example: hunting, forest fire). 	<ul style="list-style-type: none"> ➤ Creating opportunities for group discussion, asking questions and sharing experiences by children. ➤ Organising group activities to identify producers and consumers. ➤ Providing material on producers/ consumers and making e-material available. ➤ Developing/creating worksheets for new concepts. ➤ Providing learning opportunities to children to make a model of the food chain. ➤ Initiating a class discussion on what would happen if one of the producers or consumers in the food chain disappeared. ➤ Organising project work on field visit experiences. 	<ul style="list-style-type: none"> ➤ Pictures/ materials on producers and consumers. Examples of various producers and consumers. ➤ Examples and visuals of the food chain. ➤ Visuals and examples of decomposers. ➤ Visual and examples of scavengers. ➤ Children's experiences.

Integration: Social Studies, Languages

Theme 8: Sound and Noise

The theme 'Sound and Noise' has been included in the Science curriculum with the aim of developing awareness regarding the negative effects of noise on health. The theme will discuss ways of reducing noise in the surroundings. It also aims to generate understanding of the difference between noise and sound, causes of noise in the surroundings and uses of sound as warning signals.

Learning Outcomes:

Children will be able to:

- identify objects that produce pleasant sounds and objects that produce unpleasant sounds;
- recognise sounds produced by some common objects;
- identify sounds produced by some animals and mimic them;
- identify sounds produced by trees and fallen leaves;
- appreciate the importance of sound as a warning signal to save life;
- enlist causes of noise pollution;
- suggest some ways to reduce noise in the surroundings;
- discuss how loud sound affects health.

Sound and Noise		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ▶ Sounds made by common objects (clock, whistle, tea kettle, cooker, piano, call bell, flute, etc.). ▶ Sound made by living beings – plants, animals, human beings. ▶ Sound made by trees and fallen leaves. ▶ Pleasant and unpleasant sounds. ▶ Warning sounds (fire alarm, ambulance siren). ▶ Harmful effect of loud noise (vehicle, loud speaker, fire cracker). ▶ Ways to reduce noise pollution. 	<ul style="list-style-type: none"> ▶ Providing opportunities to children to share personal experiences related to sounds that are pleasant /unpleasant. ▶ Citing examples of pleasant and unpleasant sounds. ▶ Organising group activity to identify sounds of some objects (by using audios tape or mobiles). ▶ Discussing various causes of noise pollution (based on personal experiences) and suggesting ways to overcome them. ▶ Discussing uses of warning sounds (doing mock exercises). ▶ Organizing quizzes/riddles on issues related to noise pollution. 	<ul style="list-style-type: none"> ▶ Personal experiences of children. ▶ Mimic of various sounds. ▶ Documentary film on sounds of various vehicles, warning sounds. ▶ Sounds, made by various vehicles/ objects / instruments.

Integration: Social Studies, Languages

Theme 9: Work and Energy

This theme aims at developing an understanding of 'Work' and 'Energy' and the relationship between the two. The theme further discusses renewable and non-renewable sources of energy used in daily life and the need to save energy.

Learning Outcomes:

Children will be able to:

- indicate various food items that give more energy than other food items;
- discuss the meaning of work by taking examples from daily life;
- cite examples and explain the situations where work is done/ work is not done;
- demonstrate through activity, work done/ work not done, in different situations;
- explain why energy is needed for work;
- differentiate between work and energy with examples;
- give examples from daily life of the amount of energy required for different kinds of work;
- enlist different forms of energy (light, electricity, heat, sound) and give examples of each kind;
- appreciate the importance of energy (light) in daily life.

Work and Energy		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Meaning of work, examples of work done/not done. ➤ Definition of energy; energy is need for work. ➤ Renewable and non-renewable sources of energy, examples of each kind. ➤ Various kinds/forms of energy - light, heat, electricity, sound. 	<ul style="list-style-type: none"> ➤ Initiating discussion on personal experiences of children and sharing with peers. ➤ Introducing new concept (work, energy) by giving various examples. ➤ Conducting simple activities with children that help to demonstrate when work is done in different situations. ➤ Demonstrating different forms of energy through various forms of energy activities. 	<ul style="list-style-type: none"> ➤ Personal experiences of children. ➤ Narratives to save energy. ➤ Examples of different kinds of work done/not done. ➤ Demonstration/ activities depicting meaning of work done. ➤ Examples of different forms of energy with and without pictures.

Integration: Social Studies.

Theme 10: Light and Shadows

The aim of introducing this theme is to develop concepts related to light and shadow. Some physical properties of objects i.e. transparent, opaque, translucent would also be discussed with examples. Another objective is to introduce some simple features of light and its uses and process of shadow formation in simple language.

Learning Outcomes:

Children will be able to:

- conduct simple activities by using various objects and classify them;
- record observations of each object (as kind of material);
- conduct simple experiment/activity to form the shadow (with the support of elders);
- infer why a shadow is formed and what conditions are required for its formation;
- enlist changes seen in sun in the morning, afternoon, evening and night (advise not to see sun with naked eyes);
- infer why day/night are formed;
- differentiate between different motions of earth (revolution of earth);
- explain the phenomenon of solar eclipse in simple language.

Light and Shadows		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<p>Revisit previous learning: Objects as transparent, translucent, opaque; features of each type of objects.</p> <ul style="list-style-type: none"> ➤ Formation of shadows: in day, night, dim light; ➤ Condition for formation of shadows; ➤ Day and night formation; some idea of solar and lunar eclipses 	<ul style="list-style-type: none"> ➤ Providing opportunities to children to share their personal experiences, discussion with teacher and peer group. ➤ Conducting simple activities/experiment to observe simple properties of light. ➤ Providing opportunities to observe and classify objects as transparent, translucent and opaque. ➤ Conducting simple activities by children to demonstrate shadow formation with the support of teacher. ➤ Creating opportunities to enlist uses of light in daily life. ➤ Conducting simple experiment to demonstrate how day and night are formed (simple idea – to be dealt with in greater detail in Social Studies/ Geography). ➤ Depicting activities on movement or revolution and rotation of earth ➤ Demonstrating through simple experiment how solar and lunar eclipses are formed. ➤ Filling up of work sheets by children on learnt concepts. 	<ul style="list-style-type: none"> ➤ Live experiences of children related to this theme. ➤ Luminous and non-luminous objects. ➤ Material used to show objects as transparent, translucent and opaque. ➤ Examples of transparent, translucent and opaque objects ➤ Experiment/activities explaining how shadow is formed. ➤ Picture depicting how day /night is formed ➤ Activities/demonstration depicting movement or revolution and rotation of earth. ➤ Picture/demonstration to show solar and lunar eclipses.

Theme 11: Simple Machines

The theme 'Simple Machine' aims to help students understand how machines have made our lives simple and the variety of machines used in our daily lives. The children will also be introduced to the various kinds of levers.

Learning Outcomes:

Children will be able to:

- appreciate the discovery and use of simple tools/machines in daily life;
- enlist tools/ simple machines used in day to-day life;
- classify simple machines based on their working principles (levers I, II, III);
- give examples of each kind of simple machines;
- discuss the need for levers to form different kinds of machines;
- draw picture of each kind of machine and label major parts;
- conduct simple experiments/activities to demonstrate how simple machines function.

Simple Machines		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul style="list-style-type: none"> ➤ Need for machines. ➤ Types of simple machines used in day-to-day life (lever, screw, pulley). ➤ Need for levers, types of levers, I, II, III order, examples related to daily life. 	<ul style="list-style-type: none"> ➤ Creating various situations to listen children's experiences related with the use of machines in daily life. ➤ Relating the theme to body parts joints, acting as levers (e.g. elbow joint, knee joint). ➤ Showing simple machines, which are used in kitchen, at home and in school. ➤ Explaining principles on which different machines function. ➤ Conducting activities to identify different kind of machines and classifying them into 3 categories (Lever I, II, III). ➤ Drawing of different kinds of machines in the class. ➤ Giving hands-on experiences to make models of machines. ➤ Demonstrating and conducting activities on how simple machines work. 	<ul style="list-style-type: none"> ➤ Children's experiences related to simple machines. ➤ Various kind of simple machines used in daily life. ➤ Activities conducted to classify machines having levers as I, II, III. ➤ Pictures of different kinds of machines. ➤ Children's drawings.

Theme 12: Cleanliness and Hygiene

The theme Cleanliness and Hygiene is viewed as an essential area and has therefore been included in EVS as well in Classes I & II. The idea of including this theme in Class V is to reinforce healthy habits for healthy living. In addition, it will help to create an awareness in children about how one can contribute towards keeping the surroundings clean.

Learning Outcomes:

Children will be able to:

- ✔ demonstrate when and how to wash their hands for healthy living;
- ✔ identify causes of source disease which occur due to unclean surroundings, personal hygiene;
- ✔ develop awareness and sensitivity towards keeping public places clean;
- ✔ share cleanliness issues with family members so that healthy habits can be developed among family members as well;
- ✔ identify degradable and non-degradable garbage in the surroundings and give examples of each;
- ✔ discuss how to reduce non-degradable garbage to keep the surroundings clean;
- ✔ create slogans and demonstrate how to dispose-off garbage in the surroundings.

Cleanliness and Hygiene		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<p>Revisit learning of Class III particularly for inculcation of healthy habits.</p> <ul style="list-style-type: none"> ➤ Cleanliness of body, body parts, their care, cleanliness of clothes, food, water, healthy habits. ➤ Diseases due to lack of personal hygiene and unclean surroundings. ➤ Degradable and non-degradable garbage with examples. ➤ How to reduce non-degradable garbage in the surroundings. 	<ul style="list-style-type: none"> ➤ Building on children's previous learning. ➤ Providing opportunities to children to discuss, interact, ask questions, and share personal experiences during T-L process. ➤ Demonstration of some hands-on activities for habit formation (hand washing). ➤ Providing opportunities to children as part of group work to discuss issues related to cleanliness. ➤ Preparing work sheets for practice. ➤ Arranging and conducting quizzes/question answer sessions. ➤ Conducting awareness campaigns on cleanliness personal hygiene. ➤ Assigning project work on various issues (e.g. slogan for awareness on cleanliness). ➤ Showing children degradable and non-degradable materials in the environment and encouraging them to segregate at source. ➤ Giving projects to children to identify ways in which they can reduce non- 	<ul style="list-style-type: none"> ➤ Materials used for cleanliness (*House). ➤ Personal cleanliness material (Body). ➤ Demonstration on proper washing hands (by elders). ➤ Hand wash material. ➤ Posters on communicable diseases ➤ Matching cards (Names of diseases & their symptoms). ➤ Examples of degradable materials. ➤ Examples (material) of non-degradable material. ➤ Slogans on awareness generation on garbage disposal. ➤ Worksheets, quizzes and riddles on the theme.

Cleanliness and Hygiene

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
	<p>biodegradable garbage in their own homes/ schools.</p> <ul style="list-style-type: none">▶ Asking children to prepare slogans on awareness generation on garbage disposal.▶ Asking children to make two dust bins – for degradable and non-degradable garbage in the class.	

Integration: Languages, Health and Physical Education

Note: *Hand washing and cleanliness messages need to be reinforced regularly in all grades so as to make this as habit.*

